

## ABSTRACT OF THE DISCLOSURE

The object of the present invention is to provide a semiconductor memory device wherein analog data signal potential read out from a memory cell to bit-line (bit-line read-out potential) can be measured precisely. In this 5 invention, a sense part circuit block 140 differentially amplifies data signal occurring on one of a pair of bit-lines (for example, bit-line BLN<sub>k</sub>, BLT<sub>k</sub>) in a memory cell array 110, and reference signal occurring on another of the pair, and data is read out. Bit-lines BLN<sub>1</sub>, BLT<sub>1</sub>, -, BLN<sub>n</sub>, BLT<sub>n</sub> are connected to a reference potential setup circuit block 150. Reference potential setup 10 circuit 150 sets up potential assigned from outside of the device as potential of reference signal on bit-line. Bit-line read-out potential is indirectly obtained from the differential amplification result by controlling the reference potential with the reference potential setup circuit block 150.